

# AMERICAN FARMER.

RURAL ECONOMY, INTERNAL IMPROVEMENTS, PRICES CURRENT.

"O fortunatos nimium sua si bona norint  
Agricolae." . . . VIRG.

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## AGRICULTURE.

COMMUNICATED FOR THE AMERICAN FARMER.

J. S. SKINNER, ESQ.

Dear Sir—I enclose you an extract from the proceedings of the Agricultural Society of this County, which led to the President's Address to the Society, and a copy of the address itself.

Very truly yours,

THOMAS EMORY.

Queen Anne's County, }  
7th June, 1820. }

PROCEEDINGS OF THE

## Agricultural Society

OF QUEEN ANNE'S COUNTY.

At a late meeting of the Agricultural Society of Queen Anne's County—It was unanimously resolved, that the thanks of the Society be presented to the President, Richard Tilghman Earle, Esquire, for his able and handsome address; and that he be requested to furnish the Secretary with a copy for publication, in the American Farmer.

The President having been previously requested to address the Society on the importance and utility of their institution, then about to go into operation, expressed himself as follows:—

Gentlemen of the Agricultural Society  
of Queen Anne's County.

From early youth devoted to professional pursuits, my mind has never been employed on Agricultural subjects. For some time past, it is true, I have ranked among farmers, but I have bestowed on the culture of the soil no more than a superintending care; and that has been subject to long intervals of interruption, in the most busy seasons of the year. Candour then must elicit from me the unwilling acknowledgment, that I am illy fitted for the chair I occupy, and that I am still less qualified to perform the task your partiality has assigned to me—the task of delivering an Address to an assembly of enlightened agriculturists. Counting largely on your friendly dispositions towards me, I shall, however, venture on a few general observations for your exclusive consideration. They will have in them nothing interesting, yet they may serve as an introduction to the more useful and active duties of the society.

The promotion of agriculture among us is the avowed object of our association, and whether it is really valuable and worth promoting, is a question that seems first to challenge attention. When this is disposed of, a brief inquiry will be made into the importance and utility of our institution.

Agriculture is the art of cultivating the earth, so as to make it produce in greater abundance and perfection, and from the earliest ages to the present hour, has been held in the highest estimation among men.

The expulsion of our first parents from the Garden of Eden, was followed up with the divine injunction, "to till the ground;" and so honourable was tillage considered in ancient times, that it was the principal employment of some of the most celebrated characters of antiquity. From the active labours of the field to the more

splendid, but not more honourable, offices of the state, their wisest legislators and best warriors were often summoned. In these our days, Agriculture is likewise in high esteem with the world. In the extensive empire of China, it is perhaps more favoured by policy than in any other region of the globe; and for its greater encouragement, and to show his sense of its inestimable benefits, we are told, that on an appointed day annually, the Emperor undertakes the laborious occupation of directing the plough in person. At this moment, too, in many parts of the United States, to say nothing of the distinguished personages in Europe employed in its pursuits, the rural art engages the best talents of the country. Some of our most enlightened citizens, connecting it with natural history and other branches of science, are making it the object of deep study and profound research—and others equally enlightened, are practically busied in experiments that directly tend to its highest improvement; while in every part of the Union all appear to agree, that it is among the most useful arts that ever attracted the notice, or occupied the time of man.

And the worth of Agriculture is not to be alone tested, by the esteem and veneration of mankind. Eminent men have maintained it to be the sole cause of the wealth and power of Nations; and every where witnesses are at hand to testify, that it is a delightful occupation, and affords an illimitable source of individual contentment and happiness.

Whether Agriculture is the sole source of national greatness, or yields that honour to manufactures or commerce, it is not my present purpose to determine. Let it suffice for me to state, that in this respect there is a rivalry among the sisters for pre-eminence, and to which ever it belongs, Agriculture ranks high in the causes of the prosperity of nations, and is worth all the efforts patriotic men can exert to promote it. Without intending to touch the point, an opinion which I have just declined to express, I hope I may, however, be allowed to digress a moment with the assertion—that the wealth flowing from manufactures and commerce is precarious and fleeting, liable at all times to be transferred with its possessor to any other part of the world, while the wealth arising from the solid improvements of Agriculture, is permanent and durable, and being in its nature stationary, is always in readiness to subserve a nation in every emergency.

Contentment and happiness are perhaps inseparable attendants on a course of virtuous industry, be the pursuit what it may. But there is a circumstance peculiar to the occupations of a farmer, eminently calculated to enhance his happiness that must not be passed unnoticed. His principal labours are in the field with his cattle, but it is not from them alone he receives assistance. Nature labours powerfully with him, and from seed time to harvest, is unceasingly aiding in the process that is to fill his garner, and reward his toils with plenty. What a store of pleasant reflections does this mysterious and inscrutable co-operation unlock to his mind, and how admirably suited is it to keep him continually reminded of his dependence on supreme goodness, and to swell his bosom with gratitude, for Heaven's favours, conferred as it were, immediately on him! That the husbandman's life is for the most part a life of contentment and happiness, is moreover, in the mouth of all, and needs but little illustration. I shall then assume it, gentlemen, as a concession, and beg to urge it upon you as another argument of the high value of the noble Art, and of the deep interest we all have in the promotion of it.

The greater part of the people of these states are employed in cultivating the earth; and, considering the extent of country they possess, Agriculture may justly be called the trade of the Americans. If it is emphatically our trade, and it is to us as invaluable as I have al-

ready represented it to be, I defy the most errant sceptic that ever lived, to doubt our obligations to improve it by all the means in our power. When the end in view is so momentous, every method that conduces to it, we ought to pursue with ardour; but in the selection of means, it becomes us to make choice of those the most efficacious in attaining the object contemplated. That such is the character of the means of improvement embraced by agricultural societies is sincerely believed. They are more effectual than all others to the advancement of Agriculture. This point appears in a measure to be established, in the encouragement every where given to those societies. In the Old World those associations abound, and to their influence is generally ascribed the acknowledged prosperity of European Agriculture. In the United States, they are continually rising up in every direction. To the north and to the south of us they are to be found in almost every county, receiving the countenance and support of men of wealth and talents, and in some of the states they are taken under the fostering care of government, Maryland too has its agricultural societies. Although the contemplated State Society seems to have failed through the very culpable neglect of its members—several have sprung up on the Western Shore, that are conducted with a zeal becoming the exalted purposes of their institution, and promise fair to be of great utility to the public.

If these multiplied examples are not convincing, our own reflections may satisfy us of the superior competency of these associations, to the improvement of Agriculture. The successful cultivation of the invaluable Art, must depend upon a series of useful discoveries, matured and ripened by experiments into an improved system, which operations evidently require the combined efforts of associated numbers. And it may be asked, if agricultural societies do not afford the most efficacious means for conducting these operations to fortunate results, what methods more effectual can be named, to secure to us the system we are in search of? For it we in vain look to theoretic writers on Agriculture and rural economy. They have teemed in all ages, and almost in all countries. Volume upon volume has been written, and Agriculture almost every where languishes. Upon these writers we cannot depend for a system of husbandry, although it is admitted they are not without their use. Their number and efforts are at least sufficient to satisfy us, that after the fine arts and learned professions, the farmer's trade requires a greater variety of knowledge and experience than any other, and demands unremitting industry to improve it.—Is it then to the energies of enterprising and opulent citizens, we are to be indebted for a method of culture adapted to our situation? Using freely their time and money, it is certain they can do much, but may they not do more, assisted by the associated labours of others, in all respects their equals, if not their superiors, in agricultural knowledge and experience. The adage says, that two heads are better than one; and where the subjects are various and complicated, leaning upon chymistry and other sciences for an illustration of their principles, Reason tells us, that the same enterprise united with that of others, can effect more than it can of itself, and single handed.

And those associations are not more efficient in digesting and maturing useful inventions, than they are in the dissemination of them. It is their peculiar province to give publicity to the profitable results of experience; and when suggested improvements have been examined and re-examined, and tested and proved by them, they are published with an authority that naturally inspires confidence, and readily gains for them an admittance into common use and practice.

I have thus attempted, Gentlemen, concisely to demonstrate the high estimation and value of Agriculture; and that its improvement is most effectually



promoted through the agency of associated farmers; and from the whole I think I may infer, that the Agricultural Institution we have formed, may be rendered of great importance and utility to ourselves and the public. But those happy consequences cannot reasonably be looked for, without extraordinary attention on the part of its members. Devoting a portion of our time and thoughts to the institution, and performing its duties with a scrupulous exactness, we must exert our best endeavours, individually and collectively, to make it useful. Like the sterile soil we plough, it will prove unprolific, unless assiduous care is bestowed upon it, and due diligence is used to make it productive and useful.

And that our most sanguine anticipations may be realized, in the complete success of our undertaking, I implore our Great Benefactor, in the plenitude of his power and goodness beneficially to grant.

FOR THE AMERICAN FARMER.

ON THE PROFESSION OF

## A Planter or Farmer...No. 6.

*A new systematic manual, for the education of young Farmers and Planters, and for the pleasure and aid of the mature and experienced.*

In the former numbers, under this signature, the importance of a manual, or hand-book of agriculture, was respectfully held up to the consideration of our landed citizens. A work of this character is seen in the book of the right honourable Sir John Sinclair, a Baronet of north Britain, the founder, under the British legislature, of their national board of agriculture. The work is comprised in a single octavo volume of eight pages of introduction, four hundred and ninety pages of the body of the composition; and ninety-four pages of appendix, explanations of plates and index.—It is entitled "*the Code of Agriculture*," including not only arable lands, but gardens, orchards, woods, and new plantations of forest trees for building, cover, and fuel. Besides a good table of contents, the index in eighteen pages, is alphabetical, copious, minute, simple, and plain. Sir John Sinclair's code of agriculture is rendered, by this index, a book of easy reference; so that any subject may be selected on which the farmer has occasion for information or rules. Those subjects may be avoided or postponed for which the farmer has no desire, or no want, at the time. Brief and methodised as is this work, it is founded—1st. On the statistical accounts of the 893 parishes of all Scotland.—2ndly. On the county reports of Great Britain, from Cornwall to Caithness, containing 85 districts.—3rdly. On the general report of Scotland in five volumes.—and 4thly. On a number of writers and books of respectable authority, of various nations, as well ancient as modern, which with the above-mentioned reports and accounts, occupy nearly six pages, in small type, merely to exhibit their names. As this work was begun, in the first Scottish statistical accounts, in May, 1790, and was finished in the latter part of 1817, it was elaborated, in all its parts, in twenty-six years, and was effectuated through the assistance and agency of above 1000 persons.—It has thus been brought into its final compact shape, a handsome single octavo volume of about 500 pages. The first president of the board of agriculture was Sir John Sinclair, and the first secretary was the late venerable and judicious Arthur Young, Esq.—The native county of the president Sinclair, is supposed to be Sutherland or Caithness, where that north British clan prevails, and the county of Mr. Young was Suffolk, in the south of England. The second president of the board was, as is supposed, the right honourable Lord Somerville.—The secretary, is presumed to have continued in his station, till his death or resignation. These two officers had salaries of 1000*l.* and 500*l.* sterling per annum, which with the contingent expenses of clerkship, printing, engraving, office rent, stationary, &c. were paid out of the national treasury.

The republication of this work, or the importation

of a copy for every county and public library, is really an object deserving the early attention of the landed interest of the United States.\* The latitudes of Great Britain are from 51° north in Cornwall, to 58° 30' in Caithness, corresponding with 41° to 48° 30' in North America. We have very little of our territory above the latitude of 45° though an acute angle of it runs up to 46° 12'. It is certain therefore the instructions of Sir John Sinclair to the northern British farmers, residing in their rigorous climate, must be amply sufficient for the farmers of the United States, in our most northern and eastern states and counties.

In regard to the planters in the most southern states this code may not appear at first, so important; but there are many and various things displayed by this very industrious, persevering, scrutinizing, and judicious writer, which apply to all countries and climates. Knowledge is a faculty and power, as well as reason. What is it that gives to one person, of equal bodily and mental strength, a superiority over another? It is knowledge. The knowledge of producing a more plentiful crop of sugar, or grass, or rice, or oats, of cotton or wheat, of the appropriate mechanism and devices to effect operations or save labour, of skill in the cleaning, employment, and transportation of the productions of the land, of judgment in converting grass and grain into labouring and alimentary animals, of knowledge of the cheapest methods of feeding the people and cattle employed on our farms and estates, of irrigation, of clearing lands, of climates, soils, and subsoils, of exposures for vegetation and for health. The savage knows not any of these, and is a naught in agriculture.

To preserve the strength of the soil, to free it from injurious moisture, to cultivate, with the utmost advantage and profit, to raise its productions at the least expense, to procure the best instruments, to select the most promising kinds of productions, and to perform all the operations of culture, preservation, and sale, require, in all countries, the best use of many of the same faculties and acquirements of the mind.

The advantages, which may be caused to result from the best written agricultural instructions, in regard to the proper farmer, and every planter's farm also, are thus briefly stated by Sinclair. "The means have been explained, by which, in fertile districts, and in propitious seasons, the farmer may, on an average, confidently expect to reap from 32 to 40 bushels of wheat, from 42 to 50 bushels of barley, from 52 to 64 bushels of oats, and from 28 to 32 bushels of beans per acre. As to green crops (as they are called in Great Britain) 30 tons of turnips, 3 tons of clover, and from 8 to 10 tons of potatoes may be confidently relied on. In favourable seasons the crops are still more abundant. Such crops, he observes, spread over the kingdom, would produce more solid profits, than foreign commerce ever could afford."

The establishment of boards of agriculture and of societies for the improvement of its future practice, with societies to promote the employment of our crops, have already produced very great advantages. The numerous volumes of the memoirs of the various societies for promoting agriculture, which have been published in a series of late years, have diffused a knowledge of many evils to be cured, of many good practices to be pursued, of many excellent principles and rules in agriculture, and have contributed very materially to the improvement of the profession of a farmer, and to the union of the relative knowledge or science with the practice of the various arts of landed cultivation.† These observations, though they extend

\* The Editor of the American Farmer, has it under consideration to republish this work, with American notes, suited to our country.

† It appears from the papers of the Philadelphia Agricultural Society, for example, in volumes 3 and 4, that vast benefits may be derived from the leaves and roots of the Mangel Wurtzel or scarcity root, or improved beet. The quantity produced has amounted to 60 to 90 tons per acre. The family table, the milch cows, the beef cattle, and the pigs are all most agree-

to many, the publications of several respectable agricultural societies of the United States, which are annually received by the public with great pleasure, benefit and gratitude, do not extend to all, and are costly in their whole amount. But the work of Sir John Sinclair, now under disquisition in this paper, is respectfully conceived to have been effectuated under many extraordinary and favourable circumstances, calculated to render it safely fundamental, very comprehensive, respectfully literary, nicely methodical, easily understood by men of good common sense and plain educations, calculated to promote regularity of practice, and the best habits of moulding of observations and reflections, on the subject of agriculture, into regular and beneficial order; and, in short, to instruct and educate the young and uninformed, and to improve and facilitate even the intelligent, experienced, and judicious planter and farmer. It is believed, that no single book of the same size and moderate cost, now existing in our language, or perhaps, in any other, is so well adapted for a place in the first little collection of every farmer's and planter's son, and of every planter and farmer himself, as a manual or hand book of the first utility in the formation of intelligent, successful and respectable men in the landed profession.

CINCINNATUS.

## RURAL ECONOMY.

We are not advised to what extent the late frosts of the past spring have injured or destroyed the apples; last year, from some cause, there was little or no good cider made. The Editor of the Farmer advertised his willingness to give the current price of a barrel of whiskey for a barrel of good cider, but had not the good fortune to get supplied.

It is to be expected that in the general spirit for improvement in rural economy, the manufacture of cider will receive its proper share of attention.

The first volume of the American Farmer contains much valuable information on this subject. To what is there said we shall now add what is to be found in a book of 250 pages, entitled, Coxe on fruit trees. The author, William Coxe, Esq. of Sunbury (his seat) near the city of Burlington in New Jersey, has been elected an honorary member of the London Horticultural Society, with marks of distinguished estimation in some of their most valuable branches.

The following is from his pen, the fruits of his experience and science. Edit. Am. Far.

ON THE

## PROPERTIES AND MANAGEMENT OF CIDER.

This is unquestionably, the most difficult branch of the business of an Orchardist; and that on which the success of his plans must chiefly depend. It involves some principles of chemical science, not easily comprehended or explained by men of common education, yet necessary to be known to every cultivator of orchards, who aims at any degree of perfection, in the selection of his fruits, or the management of his liquor. In the explanation which I shall

ably supplied with this wonderful root, and the milch and beef cattle with its abundant leaves.—These works are full of such valuable information, but they are a collection of single operations, not intended to be given to the public with any system, or with a view to any set of general results. But Sir John Sinclair's work is the result of nine hundred or one thousand reports of parishes, counties, and kingdoms, of the literary labours of one thousand well educated and experienced persons, of twenty-six years of personal exertion of a man of genius in the arts of agriculture, of ancient and modern scientific education, and of improved modern landed practice, aided by public funds, and quickened by pecuniary and honourable rewards. The world affords no other example of such a concurrence of materials and of circumstances in the formation of a hand book,



attempt of these rules of the art of cider-making, with their principles and details, I shall avail myself of the opinions, and sometimes of the language of men of high reputation and great skill, in preference to any exposition of what might be offered as the result of my own practice and experience. Those respectable writers have been my instructors, in what may be properly denominated the mysteries of the art; I can therefore confidently recommend to others their rules and practice, as tested and confirmed by my own experience.

The properties of a cider and table apple are very different, although sometimes combined in the same apple; toughness, dryness, a fibrous flesh, and astringency, are all good properties in a cider apple—yellow flesh indicates richness and strength—the heavier the must, the stronger the cider—in the Vandervere apple, the must is eleven penny weight in the pint heavier than rain water—in the Coopers russeting, the heaviest must we know of, it is twenty-four penny weight in the pint heavier. All cider apples should ripen as late as the first of November, and not later, to prevent the expense of housing—if it be necessary to house them, it will be of great importance that they possess the property of keeping without rotting. The merit of cider, depends much on the proper separation of the fruits—those whose rinds and pulp are tinged with green, are inferior to those tinged with yellow, and should not be mixed together.

Apples which fall fully ripe, make better cider than those which are shaken, they should all be kept till perfectly mellow; the strength and flavour of cider are increased, by keeping the fruit under cover before it is ground; but unless exposed to a current of air, and spread thin, it will contract an unpleasant smell which will affect the taste of the cider—much water is absorbed in wet weather—as the fruit becomes mellow, the juice will be higher flavoured, but will lessen in quantity. The flavour is supposed to increase, as long as the fruit continues to acquire a deeper shade of yellow, without decaying—all decayed fruit should be carefully picked out before grinding: apples not ripe at the same time, should never be mixed: but three kinds, one of which possesses flavour, another richness, and a third astringency, may possibly be found to improve each other: the finest liquor I ever have seen, was made from the crab, with a small portion of the Harrison apple of Newark, and the Winesap of West Jersey. The practice of mixing different varieties may often be found eligible, for it will be more easy to find the requisite quantity of richness and flavour in two kinds of fruit, than in one; it is a fact generally understood, that ciders from mixed fruits, are found to succeed with greater certainty, than those made from one kind—although this practice would deprive the dealer of certainty in the quality of his liquor, and ought not therefore to be recommended for general adoption, yet it is worthy the attention of an admirer of fine liquor, when providing for his own consumption.

The fruit, in grinding, should be reduced as nearly as possible to a uniform mass—the advantage which cider receives from the perfect grinding of the rind and seed are well known, but not so well understood. By the mechanical

operation of the nuts, the various fluids which occupy the vessels of the fruit, are mingled with the juices of the rind and seeds, and with the macerated substance of the cells themselves.

If the juice of an apple be extracted without bruising the fruit, it will be found thin and defective in richness, compared to the juice of the same apple, extracted after it has been some time exposed in a bruised state, to the influence of the air and light; it then becomes deeply tinged, less fluid, and very rich, in the former state, it apparently contained but little sugar; in the latter, a great quantity; much of which has probably been generated since the fruit became bruised; though it may be difficult to explain satisfactorily, the means by which this effect was produced. The component parts of sugar are known to be vital air, inflammable air, and charcoal; the two latter substances are evidently component parts of the apple; and it is probable, that during the process of grinding, they may absorb and combine with a portion of the vital air of the atmosphere. In the operation of grinding slowly, the liquor acquires good qualities that it did not before possess.

In making cider from almost every fine apple, the liquor becomes more saccharine and improved, by the pomace remaining twenty-four hours in the vat, previous to being pressed; to this the must of the Hewes's crab is an exception; it always losing part of its delicacy and disposition to become fine, if not immediately separated from the pulp.

It is a generally received opinion, that the middle running of a pressing makes the finest liquor; the first third will be found to contain most saccharine particles, and less purity, requiring more fermentation; in the last running, there will be greater purity, but the saccharine part will be considerably diminished, the middle running will be found to combine strength and purity in the highest degree.

The fermentation of liquors has been divided into three stages; the vinous, the acetous, and the putrefactive: the first takes place only in bodies containing a considerable portion of sugar, and is always attended with the decomposition of that substance: the liquor gradually loses its sweetness, and acquires an intoxicating quality; and by distillation yields a greater, or less quantity of ardent spirit, according to the quantity of sugar, and the skill of the distiller.—When this fermentation proceeds too rapidly, it is sometimes confounded with the acetous; but the product of that is entirely different—whenever the fermentation, though purely vinous, becomes violent, it tends to injure the strength of the cider, by carrying off a part of the ardent spirit with the disengaged air—the acetous fermentation follows the vinous; sometimes when the liquor is in small quantity, and exposes a large surface to the air, it will precede it—in this, the vital air is absorbed from the atmosphere, and the vegetable acid, ardent spirit, and sugar, if any remain, are alike converted into vinegar.

In the putrefactive process, which succeeds the acetous, the vinegar loses its acidity, becomes foul and viscid, and emits air of an offensive smell; an earthy sediment subsides, and the remaining liquid is little but water.

As sugar is the only component part of the

apple which produces ardent spirit, it might thence be inferred, that the strongest cider would be afforded by the sweetest fruits: the juice of these sometimes, when the flesh is not highly tinged with yellow, is deficient, in what is termed "body" in liquors; and is frequently apt to pass from the saccharine to the acetous state. In the opinion of some skilful managers, much of the strength of cider is derived from the skin and seeds, hence arises their attention to grind them thoroughly. The strongest ciders are made from fruits which possess some degree of astringency.

The time which will elapse before the vinous fermentation commences, is very uncertain—in warm weather, and in cider made from weak or immature fruit, it commences in a few hours—but if the fruit is ripe, and the weather cold, it will be delayed for a week, and sometimes for a month: the fermentation of the exquisite crab cider, blended with the Harrison and Winesap, of which I have in another place made mention, was never farther apparent, than in the swelling of the liquor out of the bung hole, without any sensible effervescence—and even that did not take place till near the Spring, although the cider was in a tight cellar, secured by glazed windows. In general, the fermentation is delayed in proportion to the clearness and strength of the cider.

In the commencement of fermentation, the dimensions of the liquor are enlarged, intestine motion is observable in the cask, and bubbles of fixed air rise and break on the surface: if the casks are placed in the open air, or in cool well ventilated cellars, the fermentation will proceed moderately, and will gradually subside, as the proper degree of it has been attained, according to the purity and strength of the liquor.—Two modes of conducting the fermentation are practised; the first is with large vessels open at the top, to permit the feculent particles of the pomace to be visible as they rise to the surface, and form a skum—when the liquor has sufficiently fermented, this skum begins to crack; the fissures are at first small, but soon enlarge, and open to view the fermenting liquor oozing through them—the critical moment is to be seized as this skum begins to crack, and before it begins to subside, which will, if permitted, destroy the purity of the liquor. At the time when the openings are first perceived, the cider may be drawn off in a pure state, free from any mixture with the skum above, or the heavier particles which sink to the bottom: it will be obvious, that this process can be conducted only on a small scale; is attended with expense, and requires a close and minute attention, which few can conveniently devote to it—it is therefore not much used, but in the manufacture of the finer liquors, by very nice managers, on a very limited scale. The other mode is that which is universally practised.

The cider is placed in casks with the bungs out—either in cellars or in the open air. As the fermentation proceeds, the pomace issues from the bung hole—once or twice a day, the casks are filled from an ullage of the same liquor, which should be kept bunged to prevent an excess of fermentation: in one, two, or three weeks; according to the purity and strength of the cider, and the coolness of the season and



situation, the process of fermentation will be completed, sufficiently to permit the casks to be closed; which must be done gradually, by first putting in the bung loosely; then, as the fermentation subsides, driving it in tight, leaving loose the vent spile, which, in a day or two may also be driven in tight; the liquor must then settle for a fortnight, previous to its being racked off in clear weather. In the second mode of managing the process of fermentation, less judgment is requisite to conduct it safely—the time of closing the bung and checking the fermentation, can be pretty well ascertained by the state of the froth, or cream, discharged from the bung-hole; when that is perfectly pure, there can be little danger in stopping the cask—the less fermentation takes place, the sweeter will be the liquor; a little experience will soon give the requisite skill to any attentive manager in this operation.

If a cask be placed in a situation where there is little change of temperature, the fermentation will generally proceed, until the whole of the saccharine part is decomposed, and the liquor becomes rough and unpalatable—but as ciders which contain a large portion of sweetness are most valuable, much attention is employed to prevent an excess of fermentation; this is usually done by placing the casks in the open air, which is the most effectual method; or in sheds through which there is a free current of air; and by drawing off the liquor from one cask to another.

By these means the liquor is kept cool, and its decomposition, in consequence, retarded—but the effect of racking off, unless the liquor be bright, does not seem so well ascertained. It is generally done with a view to cool it; but heat is rarely or never disengaged in the fermentation of cider—and the air through which it passes when the operation is performed, is usually warmer than the body it is supposed to cool: some degree of cold will, no doubt, be produced by evaporation, but, never sufficient to produce the total cessation of fermentation, which takes place after the liquor has been drawn off from one cask to another. It no doubt gives out something, and may receive something from the atmospheric air, with which it can never have been properly in contact, having always been covered with a stratum of fixed air—this may at any time be proved, by holding a lighted candle close to its surface, where it will be immediately extinguished.

The process of fermentation, if the weather be cool and settled, will generally be completed in a few days; and the liquor will then separate from its impurities. Whatever is specially lighter, will rise to its surface; whilst the heavier lees will sink to the bottom, leaving the intermediate liquor clear and bright: this must instantly be drawn off, and not be suffered on any account to mingle with its lees; for these possess much the same properties as yeast, and would inevitably bring on a second fermentation the best criterion by which to judge of the proper time to rack off, will be the brightness of the liquor—this is always attended with external marks, by which the cider maker can judge—the discharge of fixed air, which always attends the progress of fermentation, has en-

tirely ceased; and a thick crust, formed of fragments of the reduced pulp, raised by the buoyant air it contains, has collected on the surface.—The clear liquor being drawn off into another cask, the lees may be put into small bags (such as are used for jellies) to filtrate, and will become bright—it may then be returned to the cask, in which it will have the effect of preventing a second fermentation—it seems to undergo a considerable change in the progress of filtration; its colour becomes deep, its taste harsh and flat—and it has a strong tendency to become acetous—should it become acetous, it must not on any account be put into the cask. If the cider, after being racked off, remain bright and quiet, nothing more need be done to it till the succeeding Spring; but if a scum collect on the surface, it must be again racked; as this, if suffered to sink, would be injurious: if a disposition to ferment continue, it will be necessary to rack off again, whenever a hissing noise is heard. The strength of cider is much reduced by frequent racking; in part, because a larger portion of sugar remains unchanged, which adds to the sweetness at the expense of the other qualities; and probably because a portion of ardent spirit escapes, whilst the liquor presents so large a surface to the air. The juice of those fruits which produce very strong cider, often remains muddy through the whole winter, and attention must be paid to prevent an excess of fermentation—the casks into which liquor is put, whenever racked off, should be made perfectly clean by scalding, with about one pailfull of boiling water, and about one pint of fresh unslacked lime, in each barrel, or in that proportion for a large cask, taking care to keep the bung in while the lime is slacking, which will effectually destroy any acidity or must in the cask: To prevent danger from bursting, air may be occasionally given by the vent—the cask must be rinsed out carefully, after the lime and hot water have been in one hour. The excess or the renewal of fermentation, is very much prevented by the operation of stumming with brimstone, into which, while in a melted state, strips of rag about six inches long are dipped, then fixed to a hook on a long bung, and burnt in the cask with a few gallons of cider tightly bunged up; the cask is then shaken well, to incorporate the fumes with the liquor, before it be opened to receive the cider which is racking off.

About the end of February, or beginning of March, in fair weather, the cider should be again racked off. If not spontaneously fine—it must be cleared by the aid of Isinglass, about one ounce to half an ounce per barrel, according to the clearness and strength of the cider: all artificial fining somewhat diminishes the strength and richness of cider, as I have fully proved by various experiments—still the cider must be perfectly fine previous to bottling, otherwise it will break the bottles, and without great care in decanting will be unfit to drink; indeed I do not recollect to have ever seen any very delicate bottled cider, that had not been perfectly fine previous to bottling, either spontaneously or artificially, except in the case of Crab cider, which from the singular organization of the apple, and from the natural tenuity and clearness

of the liquor, never can have any considerable portion of feculence to be discharged by fermentation, or separated by fining.

Cider made from good fruit, and properly manufactured may, if put up in casks after careful racking, be kept over the summer in deep dark cellars or vaults. In the practice of England, it is almost universally kept over the first season; in America but seldom: and that only in ciders of great purity and strong body, in vaults or lower cellars; such as are frequently constructed in large cities, but never, that I have seen, out of them.

The bottling of cider is usually done in the months of March and April, before the blossom fermentation takes place; or, in ciders spontaneously clear, it may be delayed till after this period of fermentation, and be performed late in May; but never during the season of blossoming—for the finest ciders are then somewhat affected in clearness, and all will have a tendency more or less, to break the bottles.

Great care should be observed in making the bottles perfectly clean—free from oil, from tartar precipitated by wine, or any kind of matter incrustated on the sides, which frequently resists washing with water, and will remain until decomposed by the acidity of the cider—the bottles should be carefully cleared of remnants of cork, which always injure the taste of the cider.

Cider should remain twenty four hours in the bottle before it is corked; it requires some time to take the bottle when thus treated, but finally is a better liquor, and less dangerous to the bottles; about an inch of vacant space should be left in the neck of the bottle below the cork, when placed on its bottom, which should be always done during the first season—the bottles may then be placed on their sides with safety. Wiring with brass or copper wire, is a correct practice, when cider is to be kept a length of time; in liquors intended to be preserved for some years, and in those of great vinous flavour, and delicacy of taste; with this management, I have cider of 1810, the mixture of Crab and Harrison and Winesap, before spoken of, which annually improves like the finest wines.

Bottled cider should be kept in the coolest cellar in the house: if the light can be excluded by shutters, it will be a great additional protection against the heat of our summers—the bottles should never touch, for the concussion which usually attends severe strokes of thunder in our climate, frequently will crack them when in contact with each other. The best situation for them, is on a brick or earthen cellar floor, with clean dry sand up to their necks; to exclude the air and prevent their jarring. No pains should be spared to procure good corks, but they should not be immersed in hot water, as is frequently done—this produces a temporary pliability and softness in the cork, which lessens the labour of corking; but it invariably is followed by a contraction and shrinking of the cork, which proves injurious eventually to the cider. With every possible attention to the management of cider, it will require the strongest bottles to withstand its disposition to fly in our warm climate—with strong bottles, and careful attention to the foregoing rules, the breakage will seldom exceed three per cent the first summer; after which there is but little risk;



When cider has become harsh by excess of fermentation, the addition of a small quantity of bruised wheat, toasted bread, or other farinaceous substances, will much diminish its disposition to grow sour.

It has been discovered by medical gentlemen of eminence in England, and is stated by Mr. Knight with many other interesting facts and opinions, for which I acknowledge myself indebted to him, that strong astringent ciders have been found to produce nearly the same effect in cases of putrid fever, as Port wine; the tanning principle which abounds in both liquors, and is said not to be found in the Peruvian bark, is probably the agent; and this in cider, might by a proper choice of fruits, be increased to almost any extent. A friend of mine, a son of an eminent physician in this State informed me, that his father was accustomed to the use of fine bottled cider in this way among his patients; and I perfectly recollect, to have produced an entire cure of the fever and ague, in a delicate young lady of thirteen or fourteen years old, who felt confidence in the remedy from the recommendation of a respectable friend, and applied to me for a bottle of crab cider, which she drank on the approach of the paroxysm about five o'clock in the afternoon, and immediately fell into a sleep, from which she awoke next morning perfectly cured.

#### TO THE EDITOR OF THE AMERICAN FARMER.

MR. SKINNER,—From your prospectus to the American farmer, I was lead to believe that your columns would be reserved, almost exclusively, for useful essays, and notices of discoveries and improvements in agriculture.—Under this impression, I became a subscriber to your paper, and anticipated much benefit from the establishment of this medium, for the exchange of ideas, and the suggestion of improvements on a subject so generally, and highly interesting to the people of the United States. You will judge then how much I was disappointed and mortified,\* when this work was

\* Now we take leave to declare our astonishment, at the surprise expressed by our correspondent.—How, with the head line of this paper in his eye, he could experience disappointment, at seeing in it,

"AN ADDRESS TO THE PUBLIC,

#### FROM THE DELEGATION OF THE United Agricultural Societies OF VIRGINIA,"

is to us utterly inconceivable—does our subscriber suppose, that this paper was established merely to record the details of actual experiments in making corn and potatoes? If so he has indeed misapprehended us, or, we have misrepresented our own views.—It is, truly, our design to appropriate the greater part of it, to practical essays and facts, and we desire that this should be the most prominent feature in its character; but it is our aim also to let this paper discuss, and vindicate the political rights of agriculture in the abstract. Nay, we go further—we sincerely lament that farmers are so little given to the study of their political rights, as a class of political society—the main pillars of our government.

Manufacturers and merchants, congregated in cities, constantly interchanging opinions and views; within reach of public and private libraries, and all the best sources of intellectual improvement, become sharply whetted and better informed and earlier apprised of every thing which concerns their particular

progressing, with a fair prospect of much public benefit, to find your paper of the 19th of May, which came to my hands two days since, almost wholly occupied by a delegation from the Union Agricultural Society of Virginia, in an unmerited, and I think, an ill-judged attack, on the manufactures of the country, a kindred branch of national industry, intimately, and necessarily, connected with the public good.

interests—does any proposed public measure threaten to invade their rights, the *esprit du corps* calls them into simultaneous motion; they meet, confederate and devise plans to protect their *hive*—and, not always satisfied with mere defence; but true to the principles of our nature, they cast about for the means of securing exclusive privileges.—They live in towns, they constitute the population, on the advertising support of which all the newspapers depend for their very existence. In these then they naturally find ready advocates of their particular policy. These papers circulate through, without depending upon, the country—hence the Farmer is not only uninformed, but often misinformed and deluded, as to his true interest!!—In a conflict between the interests of the country and the city, town papers must subserve the latter.—They would be guilty of suicidal folly if they did not.—Hence, as we thought, the necessity of offering to the public an AMERICAN FARMER'S PAPER, in the true sense of the word—a sort of common register, where each should be invited to record for the benefit of the agricultural community, whatever might have a tendency to enlighten and improve them in the practice of their calling; that this Register should be at the same time a zealous advocate to explain and defend the political rights of Husbandmen, as such.—If our correspondent, whom we do not know, but whose intelligence and feelings we highly respect, has not understood us as having reserved to ourselves this width of range for the Farmer, we beg him and the public to accept this explanation as a supplementary prospectus of our views—with mere party politics it is known that it does not intermeddle.—To revert to the particular source of the Maryland Farmer's "surprise and disappointment," what is its nature? why the publication of an address—headed thus:

"Prince-George, (Virg.) April 4th, 1820."

SIR,—In obedience to a resolution of the delegation of the United Agricultural Societies of Virginia; I notify you of their request, that the contents of the Pamphlet which you will receive by this mail, may be published in your valuable paper. As you have already printed the memorial, our request is now limited to the "Address to the Public."

Respectfully yours, &c.

EDMUND RUFFIN.

Secretary to the Delegation.

J. S. SKINNER, Esq."

Now we repeat, that if any thing may be considered as coming emphatically within the sphere of this paper—this address is most eminently entitled to insertion; and to tell the whole truth of the matter, we had filed the address to be published as soon as we could get room, and would have given it, even without having been requested—and did we not publish the address of Mr. Law, whose views are so opposite? Nay, have we not published many essays in favour of the encouragement of manufactures as we now do, cheerfully that of a Maryland Farmer? And why have we thus freely admitted them? Not from any desire to foster them at the expense of agriculture! On the contrary, we freely avow, that our partialities all lean towards the plough, over the loom.—Men may live and nations may prosper under a free government, without fine muslins and beaver hats—silks and satins, sarsonets and velvets, put out the kitchen fire, as poor Richard says; but bread is the staff of life, and the produce of the soil is the basis of population—of national wealth and strength.—We have chosen to publish what has been offered on both sides that farmers may read and judge for themselves, how far the encouragement of manufactures

Every farmer recollects with regret, the impediments which retarded our progress, which enfeebled our efforts, and held in check the proud spirit of the American soldiery, during the late war with Great Britain; the suffering that was endured, and the lives that were lost, for the want of timely attention and support to the manufactures of the country. We could not clothe our soldiers, and consequently, could not enlist men, with that facility and promptitude, which were necessary to impart life, energy and success to our military operations; the war was thereby prolonged, and the expense greatly increased; our brave soldiers were frequently obliged to contend with superior numbers, by which, thousands of lives were sacrificed, through the mistaken policy of neglecting our domestic manufactures.—I have seen the recruits, for months together, encamped on my plantation, with no other clothing than the tatters in which they were enlisted, covered with a tow linen frock, such as hostlers wear, while engaged in the drudgery of their profession; and I have been informed by officers, that there was frequent suffering by those engaged in active service for want of clothing. But whence came this scarcity of clothing? it may be asked. The answer will suggest itself to every one, on a moment's reflection; we were then engaged in war with Great Britain, the nation whence our clothing and necessities were principally derived; it was then unlawful to have any commercial intercourse with that country, consequently, our supply of foreign clothing was cut off; and we had very little cultivated our own resources to supply the deficit: and to this may be attributed much of the inefficiency and languor of our military operations during the late war; and although it was brought to a glorious issue, by the superior bravery of our fleets and armies, yet it cannot be doubted, if we had taken the field with sufficient numbers, well equipped and clothed, the object would have been effected in less time,

is necessary to, or compatible with, the welfare of the agriculturist.—It is not by a *lop-sided* discussion that truth is to be elicited, nor is it in the spirit and character of country-men to object to *hearing both sides*. They are, however, we are sorry to admit, too apt to repose themselves in the shade of indolence, leaving all great political questions, involving the dearest concerns of themselves and their posterity, to the book men, the learned men, and the keen hawk-eyed business-men, of the cities—ingloriously contented to drive their own oxen, leaving others to *manage the Republic*—if in the end they are driven into political insignificance, and made hewers of "wood and drawers of water" for bodies corporate and privileged classes, it shall not be for the want of one medium at least through which their friends may admonish them of their danger.

We have taken this occasion to explain our views somewhat more at length than we might have done; if it were not apparent from the present course of things, that such explanation would soon be necessary. To conclude for the present, we frankly confess, that we have not a clear and satisfactory view of the merits of this great question, about which the wisest politician differ so widely; and we think it more becoming at once to confess our ignorance, than either to propagate false politics, or to wrap ourselves in gravid silence, oft-times the mere affectation of wisdom. There is one fact of which we entertain no doubt, that of all classes, the tillers of the soil are the least capable of, if not the least disposed to, a monopoly of political advantages.



with less expense and a great saving of American blood. When we consider how indispensable the article of clothing is to military operations, and, that we may be again, and again, engaged in war with that nation whence we derive our principal supplies of this indispensable means of defence; I should not expect any friend to the general interests of the country, to say *explicitly*, that he would leave our manufactures to be run down by foreign rivals, unless they can protect themselves. They are clearly identified with the general interests of the nation, and equally entitled to protection from foreign rivals, and foreign enemies, with any other of the national interests—and no more.

The Virginia delegates appear to be under an impression, that the nation has been already burdened and oppressed to protect manufactures by the duty on imports. This is not so. Manufactures have been benefited by the duties inasmuch as they enhanced the price of foreign fabrics in our market, but the duties were all laid to raise revenue for the government, and were all expended by it for public purposes; and principally for the protection of commerce and agriculture. The manufactures never received one cent from the duties, nor was ever one cent of the money so raised, in any way applied for their benefit or protection. How then has the country been burdened for their protection? All the benefit they received from the duties, was indirect and incidental; flowing in a great measure, from the necessity the government conceived itself under to protect the commerce and agriculture of the country, and from the particular mode of raising revenue for that purpose, which it deemed most congenial with the general interest and the wishes of the American people, namely by a duty on imports. The Virginia delegates must know, that Congress have not imposed more duty on imports than was necessary to meet the public expense; and from the quantity imported, since the late pacification of Europe, far exceeding our exports, they must know, that the duty might have been increased, without any injurious diminution of the supply. They ought also to know that there is an actual deficit in the revenue for the present year, and a greater deficit expected the coming year; and that Congress have called for a loan of three millions of dollars. All this might have satisfied them that imports have not been unnecessarily burdened with duties for the protection of manufactures. The entire amount of their product has been expended for other purposes, and still more we see by the proposed loan, is required to meet the ordinary expenses of the government.

The delegates appear to be alarmed by fears of their own creating; they say "after what has been done for the manufactures, they know not how many millions would satisfy them." Nothing has yet been done for them, and they ask nothing to be done for them, which is not equally called for by the merchants and the agriculturists; those in the cotton and tobacco growing districts excepted. These are getting good prices for their products; their labour is busily and beneficially employed. Manufactures suffer no more than every other branch of industry out of the districts already excepted, and they ask,

in common with the farmer, the merchant, the mechanic, and the labourer, for regulations to restrain the importation of foreign merchandize within the limit in value of our exports, so as to avoid an unfavourable balance of trade, which has drawn away the specie, checked the circulation of money and involved thousands in ruin and distress. Every department of our industry, would be benefited by a regulation to effect this object, and every class of our citizens, with the exception already mentioned, calls for it.

But the delegates are fearful of taxes, if the country should manufacture for itself; it will then not consume so many foreign commodities, and consequently, the amount of import duties will be diminished. This idea might be allowed to have some effect, if we were now receiving the liberal prices for our products and labour, that we did two years since. The present price of our products will enable the country to pay very little to government, whether in the form of impost or otherwise. Flour, at four dollars and a half, the present price in the Baltimore market, yields very little to the farmer, and if brought any considerable distance to market, will not pay the expense of transportation; and other articles of produce are in proportion.—Ought not then the agricultural delegates, in the discharge of their public duty to have said, if this state of things be continued, the country will not be able to pay for any considerable amount of goods, consequently the revenue derived from that source will be diminished, and the government will be obliged, *however reluctantly*, to resort to internal taxation. This would have been much more correct; it is now perfectly ascertained that the government cannot, in the present depressed state of our labour and products, derive sufficient revenue to meet its expenses from impost, and that we can only be saved from taxes, or disgraceful loans, in this time of profound peace, by a European war, a failure of crops abroad, or some other contingency equally uncertain. I ask nothing for manufactures, *merely as such*, but for the public good. They are an important item in the general interest of the country, and entitled, with other branches of this interest to protection; they require nothing particularly for their protection; the same measures that will protect the general interest, and restore prosperity to the country, will secure their success. Foreign nations, the enemies of our prosperity, have been suffered to run them down, to favour commerce, or rather to augment, the revenue derivable from impost; but this unnatural commerce has exploded, like the frog in the fable, and brought ruin on all concerned with it, and on all that was within the sphere of its operations; the expected increase of revenue has failed, and the country is exhausted by the experiment. Taxes or loans are the inevitable result.

When the nations of Europe were restored to peace, and at leisure to supply their own wants, had the United States been led to rely more on its own resources for the supply of its wants; had manufactures been protected; had the labour of the country, that is now without employment, been brought into action, for the supply of these wants instead of supplying them from foreign nations, the country would have avoided the pre-

sent catastrophe. The provisions and raw materials required by the manufacturers would have created a market for a considerable portion of our products; specie would have been retained in the country; we would have had a regular circulation of money, and the labouring class instead of being a burden on the country, as vast numbers of them now are, would have supported themselves in comfort, and increased the national wealth by their industry. These benefits might have been secured without any diminution of the revenue from impost. It only required to repress our imports within the amount of our exports to effect this desirable object; that is the greatest amount of foreign commodities, for which the country can permanently pay, and the greatest from which it can permanently derive revenue; and that our foreign trade must ultimately be regulated agreeably to this principle, there can be no doubt. Buy less than you sell, is a maxim of the soundest policy, both to nations and individuals, and none prosper that grossly neglect the admonition.

But a monopoly like a spectre, appears to affright the agricultural delegates, in the event of manufacturing for ourselves. If the country should reserve to itself the monopoly of its own supplies, it is likely that it would more abuse the privilege, by demanding unreasonable prices for its fabrics, than foreign nations would, if suffered to break down our manufactures and take the monopoly to themselves? I think not—there is nothing to warrant the suggestion; nor could the manufacturers much abuse the privilege.—The business would be open to the whole country; any one might become a manufacturer at pleasure, and thousands would rush into it, if they saw it was a money-making business, and soon reduce the profits to the lowest rate for capital and labour.

But it is *sickly*, say the delegates; great numbers of children are penned up in confined unwholesome air, in the factories. The gentleman must have taken this on trust; nothing is more foreign to the fact; I have visited occasionally, five or six cotton factories in the vicinity of Baltimore; the only one's I have ever seen; the buildings are all handsome, extensive, and well ventilated. I have seen no houses in Virginia or elsewhere, better calculated for health than they all are, and I have noticed with peculiar pleasure, the cheerfulness, the health, activity and good order that prevailed in these useful schools of industry. They were mostly worked by children from 8 to 12 or 14 years of age, and from the extent of the buildings are not at all crowded in any part with the hands necessary to attend the machinery. The work requires attention, but is perfectly light, easy and healthful.

I write as a farmer, without any direct interest in manufactures, but from a conviction of their utility to, and connection with the general interest of the nation, and that the protection they require, in the present state of suffering and distress, is equally required by every other branch of national industry, and dictated by the soundest principles of political economy, and regard for the public good. We ought not



to depend on foreign nations for indispensable necessities, such as food, clothing, and the means of defence. We should plant, as the venerable Jefferson has said, our manufactures by the side of the agriculturist, and draw on our own resources for all indispensable supplies. We should reasonably circumscribe and limit imports, and patronize our own industry.

Having no interest in the protection of manufactures, other than a general interest in the protection of every branch of domestic industry, I have deemed it unnecessary to follow these gentlemen farther in their remarks. I do not wish to see your paper filled with discussions of this nature, but as you have opened your columns to the opposite side of the question, I leave you to judge whether it may not be proper to give the foregoing remarks an equal circulation.

### A MARYLAND FARMER.

The farmer will very soon have gathered in his crops of grain and grass, and it behoves him, of all men, to anticipate the seasons as they approach; taking care to have all his tools and implements in order, to perform in the best manner the labours allotted to each period of the year. Next, in the order of revolving seasons

"—Autumn nodding o'er the yellow plain

Comes jovial on:—"

And the husbandman must prepare for sowing the various fall grains and grass seeds which, according to his system, he may think it expedient to cultivate—we take the liberty therefore, to throw out some general reflections to our patrons, by way of advice, and as a sort of introduction, to a series of papers which we propose to offer them on the natural history and habits of the *Hessian fly*, and, in connexion therewith, some remarks on the proper depth of sowing wheat.

In the first place, it occurs to us as a gross and obvious defect that so little pains is bestowed in the preparation of the ground for seed. In many parts of our country, that indispensable implement, the roller, is scarcely to be seen in the course of a summer day's ride, and the harrows are for the most part ill constructed and inefficient—how then is the ground to be thoroughly cleared of weeds, filth, and clods, as it ought to be, to put it in a clean fine mellow state? Again—it often happens that in many parts of the field the water, having no sufficient vent, settles, and stagnates and destroys the crop; in such cases let the farmer protect his grain or grass, by high raised lands, and by deep well directed *draining furrows*, to carry off the superfluous water. It is scandalous in the eye of a good farmer, to leave any field so situated, until this precaution is taken—and again—if there be in his field, any poor ugly galled spots, let them by all means be sprinkled with manure, be it ever so little, raked up in the woods, about the headlands, on the line of old fences, or from about his farm houses. The great necessity for this dressing of poor spots, is not so much for the sake of the mere increase in the succeeding grain crop, but because it enables the grass seeds (some of which should always be sowed with or upon the grain) to take root, and hold on, until a top dressing of plaster, lime, soot, ashes or something can be applied to help on the grass through the scorching sun of the next summer. The grass so kept alive on these poor spots being turned in, makes them produce equally with other parts of the field—and in a few years the thrifty farmer, in viewing his field, has the satisfaction to see it presenting one uniform state of increasing fertility, instead of being filled with shame and disgust, at seeing it interspersed with ugly gullies and blotches, like a poor half naked neglected sheep, suffering under the scab.

Having done all in his power to have his ground in the best possible condition his next solicitude should be about his seed. It requires no more labour to sow, or to plough or harrow in, or to reap the growth

of good seed than bad—but there is a great difference in the harvest.

Let the farmer then inquire, and by all means endeavour to get the best seed. If there be any defect in his own, let him send it to market and request, if he can't go himself; that his commission merchant or agent, will buy for him, at no matter how much higher price, the choicest seed, and from the greater distance, perhaps the better—we have heard it said that seeds improve in travelling from North to South, and working animals the contrary; but we don't know that there is any truth in this remark—for ourselves, we are well satisfied, that with grain as well as animals, if you are satisfied with the kind or breed you have, then the best plan is to select with great care the best or most promising of this kind or breed, so tried and approved from year to year, for your seed or breeders. Under this course of proceeding, we think, that if your grain, or animal stock, does not go on progressively improving, at least, there is no danger of degeneracy—however, let us repeat, make sure of the best seed, and even then, steep it before you sow it—not merely on account of the effect which some steeps may have on the produce of the seed sown, but as it affords a certain means of separating and cleaning off all rotten imperfect grains, and extraneous matter—we wish we had time and room to dwell a little on some of the points to which we can here merely glance—one thing is indisputable—that unless the farmer will learn to think for himself, and to do his own part of the work in good time and well, he has no right in the hour of want or despair to call on Jupiter for assistance. He has no right, at harvest home, to complain at the poor result, to which his own laziness and improvidence have mainly contributed.

To wheat crops, with all the pains that can be taken, the Hessian fly is known to be a most implacable and destructive enemy. Whatever then has a tendency to make us better acquainted with the natural history of this insect, and the means of preventing or checking its ravages, will, we are sure, be acceptable to the readers of this paper—we are, therefore, much indebted to the enlightened and public spirited President of the agricultural society of Fredericksburg for some numbers of the Richmond Inquirer, containing an interesting controversial discussion in regard to the habits of the Hessian fly and to the proper depth of sowing wheat.

It will require some careful observation on the part of the reader to consider these papers in the proper order of connexion, because we have already published two of them without, at that time, having the others in our reach—let him then take notice that the first paper—or what we shall now call No. 1 of the series, is the letter signed J. H. Cocke, dated October, 1817—commencing in the last column of page 295 of the first volume of the American Farmer.

No. 2 is the paper given below—signed, a King William Farmer, without date. The next, which we shall present, or No. 3, is signed, A Frederick County Farmer, and ought, we suppose, to be dated, 1817 instead of 1816—No. 4 is signed, A King William Farmer, and is without date. The letter in reply to this last of the King William Farmer—signed William Merriwether, and published in the first volume of this work, pages 125—6, may be reckoned No. 5. Then comes a rejoinder from the King William Farmer, making No. 6, and lastly, a letter from James M. Garnett, Esq. to the Editor of the Farmer, together with some engravings—if they can be made to give additional illustration to the subject.

After having first turned back to, and re-perused the letter from Mr. Cocke, the reader's attention will pass to the following:—

### On the Hessian Fly,

AND ON THE PROPER DEPTH OF SOWING

WHEAT.—No. II.

TO THE EDITOR OF THE INQUIRER.

SIR—In your paper of the fourteenth current, I was much pleased to see announced by

the secretary of the Albemarle Agricultural Society, a letter from a gentleman deservedly of high standing, said to contain some new facts in the history of that insect commonly called the Hessian fly—I am well acquainted with the writer of that letter, and believe him to be one of the best practical farmers in our state—I therefore was not without hope that the means of destroying that scourge of our wheat crops were now within my reach.—You cannot well conceive my mortification, on reading the letter, to find the only remedy suggested for the evil, in my opinion (of itself) a much greater one—I allude to grazing—I am not acquainted with any stock, except sheep or horses, that can bite a blade of wheat at that early stage of its growth below the egg of the fly; nor do I believe that grazing would in the least insure any benefit, if every blade in the field could be swallowed with all the eggs on them; unless the stock were so fortunate as to take into their mouths at the same time all the flies at work.—What surety have we when a tooth leaves a blade, that a fly will not deposit on the stump, and before the wheat from its growth can invite to its aid another tooth, that the maggot may not have commenced its journey with thanks to some friendly tooth for having so much shortened it? I am of opinion, that the fly deposits in the central blade in a few days or hours after the wheat comes up, and is surely moored in its fast hold, before the wheat would bear grazing; and that they continue to deposit as long as they live, I have no doubt.—In our section of country wheat, if attacked by the fly, evidently declines by the time the blades make their appearance. If this idea be correct, grazing can have no other than a destructive tendency. Should the poor lacerated wheat recover strength by the spring to contend with the fly, (which I think on ordinary land impossible,) will not the chances of its having the rust be manifold? Besides, sir, suppose it should hereafter be ascertained that grazing is a safe-guard against the fly, I should like to be informed, how farmers residing in the maize districts of our country, and sowing none but their corn ground in wheat, can ever avail themselves of the benefit, unless they submit to a double grazing? I have been informed, that a gentleman on the Rappahannock grazed one of many fields last winter, which was entirely destroyed last spring, in consequence of the branches of the wheat, being all young, inviting the fly, and never having strength to recover.—Last spring the wheat first attacked by the fly recovered, and made a partial crop, while the late sown wheat in many places was not worth harvesting, particularly if of the late kinds. The above facts are stated to shew, that any thing having a tendency to make the wheat crops late, must place it at the mercy of the spring fly; and that grazing will not make wheat forward, I believe, is generally admitted. It has been my practice for some years past, and still is, to put my wheat in beds as high as I can raise them, and water furrowed very deep, to accomplish which, half of each bed has been formed by large double mule ploughs, drawn nearly as deep as they could be, in order to form the wedges of each bed as high as their centre,—



Most of the wheat, that was covered deep and sown early, is now putting forth new shoots from the mother root, while the blades first formed with the central stalk have been entirely killed by the maggot; they having never penetrated more than two and a half inches below the surface, leaving the mother root uninjured, while a large portion of the wheat covered shallow is entirely destroyed—I have no doubt, that if we would sow our wheat early and cover it at least three inches deep, our crops would be better guarded against the fly than they ever can be by grazing.

*A King William Farmer.*

FOR THE AMERICAN FARMER.

PHTHISIS PULMONALIS, OR

## Consumption of the Lungs.

*By Dr. Eli S. Davis, of Abbeville, (S. C.)*

*(Continued from page 119.)*

Doctor Hosack is clearly of opinion that consumption should be divided into two stages the acute and the chronic, pretty much like that of Morton, who makes the division incipiens and confirmata. It would have been impracticable for me to have extended the limits of these papers, so as to have embraced all the various divisions which physicians lay down, and for which each respective one contends.

My object will be attained as soon as I excite the necessary vigilance to the premonitory symptoms of this disease.

My wish is to prove the necessity of checking it in its incipient state, before it invades the sacred spot where life itself resides. Like all other enemies, it acquires confidence and strength in proportion to the extent of its encroachments, and its advances are directed to the points most susceptible of dilapidation. I believe it to be acknowledged on all hands that the antiphlogistic treatment is the best in the tuberculous, or suppurative stage of this disease. The warm method of treatment will no more succeed in this disorder than it formerly did in the small pox and measles.

To diminish excitement, and remove debility should occupy our first moments in the treatment of this disease. The first can be done by bleeding and blistering, the latter by tonic and exercise.

Manual labour is recommended both as a preventive and cure in many diseases, and in none perhaps, has its happy influence been more clearly illustrated than in the one now under consideration. Fuller's Gymnastica contains many useful remarks on the influence of exercise in preserving health.

The medical effects of labour did not escape the close and judicious observation of the illustrious Rush, who declares it a blessing in disguise. Labour imparts tone to the whole system, but more immediately to the muscles, and from them a corresponding tone is translated to the blood-vessels and viscera. The lungs do not fail to enjoy the salutary effects of labour in a high degree, whilst it sustains their capacity to oxygenate that quantity of blood which is necessary to insure the production of health.

In all diseases of weak morbid action, labour acts as a stimulus, which overcomes them by producing a greater degree of excitement than the diseased action. Its efficacy in consumptions has been often witnessed; but there is no case on which I could so conveniently lay my hand at present, as that detailed by Doctor Jennings, of Virginia, in a letter to Doctor Rush, of which the following is a literal copy.

"DEAR SIR,

"That theory only is to be considered a rational one which is supported by facts, and will admit of the most practical utility. If the following facts can be of service to you, it will afford me singular satisfaction to have communicated them.

"I, myself furnish the case. My maternal grandmother, my mother, five of her sisters and four of her brothers, my sister being my mother's first child, and a brother next in succession to me by birth, all of them have been swept off the stage of life, in the course of my recollection, by the fatal disease Phthisis Pulmonalis. From my youth up to the age of twenty-nine, I was sensible of great debility of the lungs, and was never during that time, able to call aloud, read, or sing with the ease which is common to other people. I had generally lived a studious and sedentary life, except that I had been the two last years partially engaged in the practice of physic. An offer was at that time made me to take charge of an academy. For the sake of gaining more leisure for the purpose of reading and study, I accepted the offer. In the mean time I had been three years occasionally employed in speaking publicly upon religious subjects. From this last engagement I considered my lungs to have gained some strength. It followed, however, that study and confinement did less agree with me than formerly—I could see a daily declension. And at length having been caught in a moderate rain, I was seized with a very severe and obstinate cough, I was bled again and again, to no purpose. After a considerable depletion, opium was tried, but in vain—debility, the cough, and every inflammatory symptom increased.

"I had recourse to riding—took a journey of several weeks, and continued to let blood as often as the pains were severe, but still in vain. In the mean time, I obtained your Inquiries, and immediately turned my attention to the subject which most concerned me. After having read that part of the work, I pursued the following plan, viz:—I let blood moderately every third day, especially if affected with inflammatory symptoms, until with the previous blood-lettings, I had been bled fifteen times in the course of five weeks. By this time I was much reduced, but my cough was no better. I then had recourse to the use of the axe, and to labour of the severest kind.

"I could not at the time repeat ten strokes without rest. It would seem in the first instance to increase my cough. The result was, that in two weeks I was nearly recovered.

"Finding much amendment, I grew remiss in my labour; and in a few weeks relapsed, and was nearly as ill as before, for I lost ground rapidly in the second instance. Two bleedings and similar labour, however, finally restored me to good health, and I can now sing loud, and

on a sharp and high key, can speak two hours together; and in one word, I consider myself freed from every symptom of that disorder."

After relating the case of his wife, which was similar to that of his own, and which was cured by a similar plan, he concludes thus:—

"I shall offer a short reflection or two, drawn from my own case. In the first place, I am persuaded that hard labour, if employed in an early stage, can cure the hereditary predisposition in some cases.

"Hence I further conclude, that consumptive parents ought never to choose sedentary or light employments for their children.

"Secondly, I conclude, that although a trotting horse may afford a sufficient exercise for many, yet labour will be far more successful.

"And lastly, in all cases, the labour should be such as to require considerable efforts on the part of the patient.

"I laboured continually, and rarely with sufficient intervals to refresh myself by rest.

I am sincerely, Sir,

Your most obedient,

SAMUEL K. JENNINGS."

From this letter it would seem that the consumption had assumed in Virginia, an attitude as inheritable as her laws of primogeniture.

*(To be Continued.)*

## THE FARMER.

BALTIMORE, FRIDAY, JULY, 14, 1820.

☞ If our subscribers will look under the editorial head of the duplicate number 7, which has been sent to them—they will there see an explanation of the reason for issuing the second edition of that number. This remark is made here, because many of those to whom the duplicate number was sent, have returned it to the Editor, under the supposition, that it had been sent to them unintentionally.

### ERROR CORRECTED.

☞ In the last number, page 118—in a postscript to Solomon Simple, for dark mud, read dock weed.—Solomon writes with a stiff hand, owing perhaps to the great difference between the diameter of a pen and a plough handle.

☞ PREVENTION BETTER THAN CURE.—It has been proved that smoking chickens in the way described in the first volume of the Farmer—will prevent them from having the gapes.

### Present Prices of Country Produce in this Market.

HAY, per ton \$15—STRAW, do. \$7—FLOUR, from the wagons, \$4 50—WHISKEY, from do. 33 cts.—BUTTER, pr. lb. 18½ to 20 cts.—EGGS, per. doz. 15 cts.—VEAL, per lb. 6 to 8 cts.—MUTTON, per quarter, 37½ to 62½ cts.—BEEF, prime pieces, 8 to 10 cts.—LIVE CATTLE, \$6 to \$7—COD FISH, per quintal, retail \$3 to \$3 50—TAR, \$2 50—TURPENTINE, soft, \$2 to \$2 25—ROSIN, \$2—PITCH, \$2 50—SHAD, No. 1, untrimmed Bacon, hog round, 8 to 9 cts.—LARD, in kegs, 11 to 12½ cts.—\$6, Do. do. trimmed \$6 50—HERRINGS, No. 1, \$2 75—CIS—COTTON, Upland, 17 to 18 cts.—BLACK-EYE PEAS, 65 cts.—SPINGLES, best Deep Creek, \$8 50—Do. Small, \$4 75 to \$5—FLOORING PLANK, 3-4, \$26—London WHITE LEAD, \$4 25 cts.—American do. \$3 75—Boiled OIL, \$1 37½—FEATHERS, 50 to 62½ cts.—Country OATS, 35 cts.—Maryland Tobacco, no sales the present week, that we know of—Virginia Tobacco, little in market, and no sales since last report.

This being harvest time with the farmers, very little grain of any kind was brought to market the present week.—The prices much the same as last report—one cargo of corn, sold for 50 cents.

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